



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|---|----------------|----------------------|-----------------------------|------------------|
| 10/714,682  | 11/13/2003     | Stephen W. Magner    | 203-0359 (81091734)<br>(FGT | 2314             |
| 36865 7   | 590 02/03/2005 |                      | EXAM                        | INER             |
| ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP 806 S.W. BROADWAY, SUITE 600 |                |                      | CHANG, CHING                |                  |
| PORTLAND, OR 97205  |                |                      | ART UNIT                    | PAPER NUMBER     |
| ĺ   |                |                      | 3748                        |                  |

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)                 |  |  |  |  |
|---|---|------------------------------|--|--|--|--|
| Office Assistant Commencer  | 10/714,682  | MAGNER ET AL.                |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit                     |  |  |  |  |
|   | Ching Chang   | 3748                         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |                              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                              |  |  |  |  |
| Status  |   |                              |  |  |  |  |
| 1) Responsive to communication(s) filed on 17 November 2004.  |   |                              |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This  | ☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final. |                              |  |  |  |  |
| 3) Since this application is in condition for allowan   | ice except for formal matters, pro                              | secution as to the merits is |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |                              |  |  |  |  |
| Disposition of Claims   |   | •                            |  |  |  |  |
| 4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.   |   |                              |  |  |  |  |
| 4a) Of the above claim(s) 4,7-14, and 16-17 is/are withdrawn from consideration.  |   |                              |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |                              |  |  |  |  |
| 6) Claim(s) <u>1-3,5,6,15,18 and 19</u> is/are rejected.  | 6)⊠ Claim(s) <u>1-3,5,6,15,18 and 19</u> is/are rejected.       |                              |  |  |  |  |
| 7) Claim(s) is/are objected to.   | 7) Claim(s) is/are objected to.                                 |                              |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.   |                              |  |  |  |  |
| Application Papers  |   |                              |  |  |  |  |
| 9)⊠ The specification is objected to by the Examiner.   |   |                              |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>13 November 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.  |   |                              |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                              |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |                              |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |                              |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |                              |  |  |  |  |
| a) All b) Some * c) None of:  |   |                              |  |  |  |  |
| <ol> <li>Certified copies of the priority documents have been received.</li> </ol>  |   |                              |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |                              |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |                              |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |                              |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |                              |  |  |  |  |
|   |   |                              |  |  |  |  |
| Attachment(s)   |   |                              |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) 🔲 Interview Summary (<br>Paper No(s)/Mail Dat                |                              |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/13/2003.  |   | stent Application (PTO-152)  |  |  |  |  |

### **DETAILED ACTION**

This Office action is in response to the applicants' election of the single Species related to Fig. 1B filed on November 17, 2004, claims 1-3, 5-6, 15, and 18-19 being readable thereon. Claims 4, 7-14, and 16-17 stand withdrawal from consideration as being directed to a non-elected Species of Fig. 1A.

### **Drawings**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character " 160 " has been used to designate both " engine controller " and " position sensor " in Fig. 1A. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/714,682 Page 3

Art Unit: 3748

## Specification

2. The disclosure is objected to because of the following informalities:

- " controller 12 " throughout the whole Specification should be " controller 160 ".
 Appropriate corrections are required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, and 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (US Patent 6,575,128).

Nakamura discloses a method (See Col. 6, line 30 through Col. 19, line 32) for controlling valve operation of valves (12) coupled to a cylinder of an internal combustion engine with a piston, the method comprising: using at least a sensor (58, 59, 60, 61)) coupled to the engine to indicate potential interference between the piston and the valve when the valves are operating in a condition where such interference is possible (See Fig. 8); determining whether the sensor has degraded; and in response to a

Application/Control Number: 10/714,682 Page 4

Art Unit: 3748

determination that said sensor has degraded, adjusting operation of the valves to a condition where there is no potential for interference (See Figs. 15-16, 36, 39, etc.); wherein said adjusting operation includes retarding cam timing (See Figs. 20-21, 29B, etc.); wherein said adjusting operation includes operating a low valve lift (See Figs. 20-21, etc.); wherein said sensor provides information in determining cam timing (59, 61); wherein said sensor provides information in determining valve lift (58, 60).

5. Claims 15, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (US Patent 6,575,128).

Nakamura discloses a computer storage medium (ECU 37) having instructions encoded therein for controlling valve operation of valves (12) coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, said medium comprising code for indicating potential interference (See Fig. 8) between the piston and the valve; code for selecting at least one of valve timing and valve lift based on a direction of valve timing change and valve lift change within an engine from said indication and further based on sensor or actuator degradation (See Figs. 15-16, etc.); and code for adjusting both of said valve timing and valve lift to reduce said potential for interference in response to said indication (See Figs. 20-21, etc.).

Application/Control Number: 10/714,682

Art Unit: 3748

#### Conclusion

Page 5

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Ming Many

Ching Chang

THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700